

### **REMARKS**

This response is being filed in reply to the Office Action mailed December 27, 2007. Claims 20-32 are pending in the application with claims 1-19 having previously been canceled.

#### **Claim Rejections**

Claims 20-25, 29, 30, and 32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Preston. Claim 31 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Preston. Claims 26-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Preston in view of Gardner. The rejections of these claims are respectfully traversed.

Preston is directed to use of FSK for data communication over a cellular telephony communications network. To prevent filtering out of data bits by an automatic gain control (AGC) used in cell phones, Preston teaches using preamble and postamble bits 73 and 79 that do not contain any actual data, but instead include sacrificial bits which can be lost or corrupted without effecting any of the digital data being sent. As shown in Fig. 5 of Preston, the preamble bits can include the sacrificial bits and a sync pattern, both of which are transmitted using the FSK modulation with a first frequency  $f_1$  being used for the one bits and a second frequency  $f_2$  being used for the zero bits. An example of the modulated FSK signal is shown in Fig. 6. By putting sacrificial bits at the beginning and end of the packet, scaling and/or filtering out of the signal can occur at the AGC without causing a loss of data. This is shown in Fig. 7 where the sacrificial preamble and postamble bits are corrupted while the intermediate data is maintained.

According to the Office Action, these preamble and postamble bits comprise the "periods of silence" recited in Applicants' claims. This is incorrect. Preston clearly teaches as shown in Fig. 5 that the preamble and postamble are not periods of silence (i.e., no bits), but are sacrificial bits (ones and zeros) and clearly teaches as shown in Fig. 6 that both the ones and zeros are transmitted, not a silence, but as periodic signals of different frequencies  $f_1$  and  $f_2$ , and further clearly shows that this is true of the sacrificial bits. See Fig. 7 where the corrupted sacrificial bits are indicated as all being of either the first or second frequencies,  $f_1$  and  $f_2$ ; as well as the corresponding description at Col. 6, lines 9-13. Moreover, the excerpt noted by the Examiner at Col. 6, lines 24-30 itself expressly indicates that the preamble and postamble of the data packet

are not periods of silence. That portion states that "the tones that are generated for these sacrificial bits in the preamble and postamble can be scaled or filtered ..." (emphasis added). Preston is sending tones at all times, and not periods of silence.

Thus, Preston does not teach "generating a periodic data signal modulated with data and periods of silence" as variously recited in Applicants' claims. Rather it teaches generating a periodic data signal modulated with real and sacrificial data. Nor is there any disclosure from Preston that would suggest the above-quoted step from Applicants' claims. Accordingly, claims 20-25 and 29-32 each patentably define over Preston.

With respect to the rejection of claims 26-28, Gardner has been applied to these claims in combination with Preston. Gardner is cited only for its applicability to the additional limitations added in these dependent claims. However, Gardner does not make up for the above-noted deficiencies of Preston. That is, there is nothing from Gardner that teaches or suggests generating a modulated periodic data signal having periods of silence. Accordingly, claims 26-28 also patentably define over these references.

In view of the foregoing, Applicants respectfully submit that all claims are allowable over the prior art. Reconsideration is therefore requested. The Examiner is invited to telephone the undersigned if doing so would advance prosecution of this case.

The Commissioner is hereby authorized to charge Deposit Account No. 07-0960 for any required fees, or to credit any overpayment associated with this communication.

Respectfully submitted,

REISING, ETHINGTON, BARNES, KISSELLE, P.C.

/James D. Stevens/

---

James D. Stevens  
Registration No. 35,691  
P.O. Box 4390  
Troy, Michigan 48099  
(248) 689-3500

Date: May 27, 2008  
JDSdim